WISCONSIN DIVISION OF PUBLIC HEALTH
Department of Health and Family Services

TB Fact Sheet Series

RIFATER® AND RIFAMATE® IN THE TREATMENT OF TB

Rifater® and Rifamate® are two combined preparations of anti-tuberculosis (anti-TB) drugs available for use in the United States. These preparations help patients adhere to treatment and are therefore important for patients who cannot be given directly observed therapy (DOT).[1] Because treatment with combined preparations precludes inadvertent monotherapy by the patient, use of these medications decreases the risk that drug resistance will develop.[2] Unfortunately, these combinations are not recommended for children or adolescents under 15 years old.

Rifater® is a combination of isoniazid, rifampin, and pyrazinamide used during the *initial phase* of treatment.

- Rifater® makes adherence easier for patients who are not on DOT.
- Each tablet of Rifater® contains 50 mg of isoniazid, 120 mg of rifampin, and 300 mg of pyrazinamide. Dosage varies by the weight of the patient, as illustrated below.

Up to 98 lb., or 44 kg	4 tablets daily, to be taken together
99-120 lb., or 45-54 kg	5 tablets daily, to be taken together
121+ lb., or 55+ kg	6 tablets daily, to be taken together

Use of Rifater® may result in decreased absorption of rifampin, possibly because of interaction with pyrazinamide. However, any decrease is probably offset by the higher dosage of rifampin that is included in the combination.[3]

Rifamate® is a combination of isoniazid and rifampin used during the *continuation phase of treatment* of fully drug-susceptible TB.

- Rifamate® simplifies therapy; the patient needs only one bottle of medicine.
- Each tablet of Rifamate® contains 150 mg of INH and 300 mg of rifampin. The usual adult dose is two capsules daily, taken at the same time.

When prescribing combined preparations, the physician must write out the prescription carefully and educate the patient thoroughly.

- Because the medication names are very similar, they must be spelled out correctly and legibly on the prescription.
- Rifamate® capsules must be carefully distinguished from rifampin-only prescriptions that have a similar appearance (e.g., Rimactane® and Rifadin®). Prescribing errors have been made.
- The prescription should clearly indicate that a combined preparation is required.

- The patient must be told to take all tablets for the day at the same time and take all of the prescribed tablets. If patients take fewer than the prescribed number of tablets, it is possible for drug resistance to develop or for treatment to fail.

Fixed combinations should not be used for patients who are receiving DOT. For patients on DOT, individual medications should be given as an intermittent (twice- or three times-weekly) therapy regimen whenever appropriate.

For more information about combination drugs, call the TB Program at (608) 266-9692.

REFERENCES AND NOTES

[1] Combs DL, O' Brien RJ, Geiter LJ. USPHS tuberculosis short-course chemotherapy trial 21: effectiveness, toxicity, and acceptability: the report of final results. *Ann Intern Med* 1990; 112:397-406.

[2] Moulding T, Dutt A, Reichman L. Fixed-dose combinations of antituberculous medications to prevent drug resistance. *Ann Intern Med*. 1995; 122:951-954.

[3] One concern that has been raised about combination tablets is the possible decreased absorption of rifampin. In one controlled trial, patients who received that combination tablet did worse than those who received individual medications. These patients had a somewhat higher relapse rate during the 18-month follow-up period after completion of treatment, compared with patients who received separate drugs.* On the other hand, the average adult dosage of Rifater® provides a 20% higher dosage of rifampin (720 mg) than the usual dosage of rifampin prescribed separately (600 mg). Therefore, since absorption has decreased 15-20% in some series, the effective dosage of rifampin with Rifater® is probably equivalent.

*_See_ Singapore Tuberculosis Service/British Medical Research Council. Assessment of a daily combined preparation of isoniazid, rifampin, and pyrazinamide in a controlled trial of three 6-month regimens for smear-positive pulmonary tuberculosis. *Am Rev Respir Dis* 1991;143:707-712.

Product names are provided for identification purposes only; their use does not imply endorsement by the Wisconsin Department of Health and Family Services.